



August 17, 2015

Tom Moe USS Corporation P.O. Box 417 Mountain Iron, MN 55768

RE: Project: NPDES-TB Wk1 Pace Project No.: 1251168

Dear Tom Moe:

Enclosed are the analytical results for sample(s) received by the laboratory on August 05, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Melisa M Woods

Mazzi Wirds

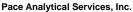
melisa.woods@pacelabs.com

Project Manager

Enclosures

cc: Terri Sabetti, Northeast Technical





315 Chestnut Street Virginia, MN 55792 (218) 742-1042



CERTIFICATIONS

Project: NPDES-TB Wk1

Pace Project No.: 1251168

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01 Alaska Certification #: UST-078 Alaska Certification #MN00064 Alabama Certification #40770 Arizona Certification #: AZ-0014 Arkansas Certification #: 88-0680 California Certification #: 01155CA Colorado Certification #Pace Connecticut Certification #: PH-0256

EPA Region 8 Certification #: 8TMS-L Florida/NELAP Certification #: E87605

Guam Certification #:14-008r Georgia Certification #: 959 Georgia EPD #: Pace

Idaho Certification #: MN00064 Hawaii Certification #MN00064 Illinois Certification #: 200011 Indiana Certification#C-MN-01 Iowa Certification #: 368

Kansas Certification #: E-10167 Kentucky Dept of Envi. Protection - DW #90062 Kentucky Dept of Envi. Protection - WW #:90062

Louisiana DEQ Certification #: 3086 Louisiana DHH #: LA140001 Maine Certification #: 2013011 Maryland Certification #: 322 Michigan DEPH Certification #: 9909

Virginia Minnesota Certification ID's

315 Chestnut Street, Virginia, MN 55792 Alaska Certification #MN01084

Arizona Department of Health Certification #AZ0785 Minnesota Dept of Health Certification #: 027-137-445 Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace Montana Certification #: MT0092 Nevada Certification #: MN_00064 Nebraska Certification #: Pace New Jersey Certification #: MN-002 New York Certification #: 11647 North Carolina Certification #: 530

North Carolina State Public Health #: 27700

North Dakota Certification #: R-036

Ohio EPA #: 4150 Ohio VAP Certification #: CL101 Oklahoma Certification #: 9507 Oregon Certification #: MN200001 Oregon Certification #: MN300001 Pennsylvania Certification #: 68-00563

Puerto Rico Certification Saipan (CNMI) #:MP0003 South Carolina #:74003001 Texas Certification #: T104704192 Tennessee Certification #: 02818 Utah Certification #: MN000642013-4 Virginia DGS Certification #: 251 Virginia/VELAP Certification #: Pace Washington Certification #: C486 West Virginia Certification #: 382 West Virginia DHHR #:9952C

Wisconsin Certification #: 999407970

Nevada DNR #MN010842015-1

North Dakota Certification: # R-203 Wisconsin DNR Certification #: 998027470 WA Department of Ecology Lab ID# C1007





SAMPLE SUMMARY

Project: NPDES-TB Wk1

Pace Project No.: 1251168

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1251168001	SD 001 (Seep 020)	Water	08/05/15 10:45	08/05/15 12:50



Virginia, MN 55792 (218) 742-1042

SAMPLE ANALYTE COUNT

Project: NPDES-TB Wk1

Pace Project No.: 1251168

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
1251168001	SD 001 (Seep 020)	EPA 1664 TPH	MBL	1	PASI-M
		USGS I-3765	BEM	1	PASI-V
		EPA 300.0	CSD	1	PASI-V



ANALYTICAL RESULTS

Project: NPDES-TB Wk1

Pace Project No.: 1251168

Date: 08/17/2015 11:02 AM

Sample: SD 001 (Seep 020)	Lab ID:	1251168001	Collecte	d: 08/05/15	5 10:45	Received: 08/	05/15 12:50 Ma	trix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1664 SGT-HEM, TPH	Analytical	Method: EPA 1	1664 TPH						
Total Petroleum Hydrocarbons	0.90J	mg/L	5.0	0.37	1		08/11/15 11:06		В
USGS I-3765 TSS	Analytical	Method: USGS	S I-3765						
Total Suspended Solids	1.6	mg/L	1.0	1.0	1		08/12/15 13:59		
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Sulfate	901	mg/L	4.0	0.18	2		08/12/15 00:29	14808-79-8	



QUALITY CONTROL DATA

Project:

NPDES-TB Wk1

Pace Project No.:

1251168

QC Batch:

WET/43413

QC Batch Method:

EPA 1664 TPH

Analysis Method:

EPA 1664 TPH

Analysis Description:

1664 SGT-HEM, TPH

Associated Lab Samples: METHOD BLANK: 2045962

1251168001

Matrix: Water

Associated Lab Samples:

1251168001

Blank Result Reporting

Parameter

Units

Limit

Analyzed

Qualifiers

Total Petroleum Hydrocarbons

mg/L

0.60J

5.0 08/11/15 11:06

LABORATORY CONTROL SAMPLE:

Parameter

2045963

Spike Conc.

LCS Result

LCS % Rec % Rec Limits

Qualifiers

Total Petroleum Hydrocarbons

mg/L

Units

20

13.7

68 64-132

MATRIX SPIKE SAMPLE:

2047426

Parameter Units 1251168001 Result

Spike Conc.

20

MS Result

MS % Rec % Rec Limits

64-132

Qualifiers

SAMPLE DUPLICATE: 2047427

Units

mg/L

1251258001 Result

Dup Result

RPD

15.9

Max RPD

75

34

Qualifiers

Parameter Total Petroleum Hydrocarbons

Date: 08/17/2015 11:02 AM

Total Petroleum Hydrocarbons

mg/L

1.6J

0.90J

1.2J

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: NPDES-TB Wk1

Pace Project No.: 1251168

QC Batch: WET/19635 Analysis Method: USGS I-3765

QC Batch Method: USGS I-3765 Analysis Description: USGS I-3765 Total Suspended Solids

Associated Lab Samples: 1251168001

METHOD BLANK: 237182 Matrix: Water

Associated Lab Samples: 1251168001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Total Suspended Solids mg/L <1.0 1.0 08/12/15 13:58

LABORATORY CONTROL SAMPLE: 237183

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Suspended Solids** mg/L 239 214 90 80-120

SAMPLE DUPLICATE: 237184

1251310002 Dup Max **RPD RPD** Parameter Units Result Result Qualifiers 104 8 10 Total Suspended Solids 96.0 mg/L

SAMPLE DUPLICATE: 237185

Date: 08/17/2015 11:02 AM

1251267002 Dup Max RPD RPD Parameter Units Result Result Qualifiers 120 Total Suspended Solids mg/L 128 6 10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: NPDES-TB Wk1

Pace Project No.: 1251168

Date: 08/17/2015 11:02 AM

QC Batch: WETA/13154 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 1251168001

METHOD BLANK: 236547 Matrix: Water

Associated Lab Samples: 1251168001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Sulfate mg/L 1.2J 2.0 08/11/15 13:35

LABORATORY CONTROL SAMPLE: 236548

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Sulfate mg/L 50 53.2 106 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 236549 236550

MS MSD 1251210001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Sulfate 90-110 0 20 mg/L 164 100 100 267 265 102 101

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 236551 236552

MS MSD 1251188001 MS MSD MS Spike Spike MSD % Rec Max % Rec Limits RPD Parameter Units Result Conc. Conc. Result Result % Rec RPD Qual Sulfate 2.1 50 50 49.6 50.0 95 96 90-110 1 20 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: NPDES-TB Wk1
Pace Project No.: 1251168

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis
PASI-V Pace Analytical Services - Virginia

BATCH QUALIFIERS

Batch: WET/43413

[BE] Batch extracted by solid phase extraction (SPE).

ANALYTE QUALIFIERS

Date: 08/17/2015 11:02 AM

B Analyte was detected in the associated method blank.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NPDES-TB Wk1

Pace Project No.: 1251168

Date: 08/17/2015 11:02 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1251168001	SD 001 (Seep 020)	EPA 1664 TPH	WET/43413	_	
1251168001	SD 001 (Seep 020)	USGS I-3765	WET/19635		
1251168001	SD 001 (Seep 020)	EPA 300.0	WETA/13154	ļ	

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Requeent fit Chain-of-Custody is a LEGAL DOCUMENT. All relevant fit CLIENT: USS CORP

Due Date: 08/19/15

			ě	; 4	8	9	æ	7	6	G	4	Q.	2	4	ITEM #		Request	Phone:	Email:	M# Iron	Address:	Require	Section A
			ADDITIONAL COMMENTS						3					SD 001 (Seep 020)	SAMPLE ID One Character per box. (A-Z, 0-9 f, -) Sample kds must be unique		Requested Due Date:	Fax	, mile out oo	W Iron MN 55768	1.	용	1A
		Par	RELINCU									-		WT	Darking Weeter DW Water Water Work Water Wor	i to left)	Project#:		Purchase Order #	copy to	Report To: Tom Moe	Required Project Information:	Section B
SAMPLER NAME PRINT Name SIGNATURE		Paudorente	RELINGUISHED BY J.A.F. LAGION											16:45	START START DATE TIME DATE	COLLECTED		NPDES-TB WK1			foe	formation:	
SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER:		T 1	DATE											5/10:45	SAMPLE TEMP AT COLLECTION	١	q	70		 		, t	. <i>†</i> .
Pan		12:50	#					£	,	•				·.	# OF CONTAINERS Unpreserved H2SO4		ace Profile #	Pace Project Manager:	Page Ouote:	Address:	ftention:	Invoice Information:	ection C
n prest le		Wall	ACCEPTEDS												HNO3 HCI NaOH Na282O3 Methanol Other	Preservatives		_		ne:		mation:	
DATE Signed:			CCEPHED BY/ARFILMING											×		Y/N	A Parties	heather.zika@paœlabs.com.				/	
8-5-15		~	DATE					-									Removeded Analysis Filmson (VR)						CLIENT: USS CORP
		12:50																					CORP
Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)	3.5	ンス	SAMPLE CONDITIONS											l ou	Residual Chlorine (Y/N)			State / Focation	Regulatory Agency			<u> </u>	1

Pace Analytical"

hold, incorrect preservative, out of temp, incorrect containers)

Document Name: Sample Condition Upon Receipt Form

Document No.: F-VM-C-001-Rev.09 Document Revised: 23Feb2015 Page 1 of 1

Issuing Authority:

Pace Virginia, Minnesota Quality Office

Sample Condition Client Name:			Project	#:
USS COIP		<u> </u>	-/	#
Courier: Fed Ex UPS Commercial Pace	USPS		Client	
Commercial Pace Tracking Number:	Othe	r:		1231100
Custody Seal on Cooler/Box Present?	No	Seals	Intact?	Yes No Optional: Proj. Due Date: Proj. Name:
Packing Material: Bubble Wrap Bubble B	ags 🔲	None	Other:_	Harter Jes No
Thermometer Used: 140792808	Type of	ice: ြ	Wet	Blue None Samples on ice, cooling process has be
Cooler Temp Read °C: 4.2 Cooler Temp Emp should be above freezing to 6°C Correction Fac		·c: <u>4</u>	ر کر	Biological Tissue Frozen? Yes No Comments:
Chain of Custody Present?	∀yes	□No	□n/a	1.
Chain of Custody Filled Out?	۷⁄es	□No	□N/A	2.
Chain of Custody Relinquished?	Yes	□No	□N/A	3.
Sampler Name and Signature on COC?	Ves	□No	□N/A	4.
Samples Arrived within Hold Time?	Yes	□No	N/A	5.
Short Hold Time Analysis (<72 hr)?	□Yes	MNo	□N/A	6.
Rush Turn Around Time Requested?	□Yes	YNO	□N/A	7.
Sufficient Volume?	_ ∀ Yes	□No	□n/a	8.
Correct Containers Used?	Yes	□No	□N/A	9.
-Pace Containers Used?	[∀ Yes	□No	□N/A	
Containers Intact?	Yes	□No	□N/A	10.
Filtered Volume Received for Dissolved Tests?	□Yes	□No	ŊN/A	11. Note if sediment is visible in the dissolved containers.
Sample Labels Match COC?	⊡ √es	□No	□N/A	12.
-Includes Date/Time/ID/Analysis Matrix:	· · -			
All containers needing acid/base preservation will be checked and documented in the pH logbook.	Yes	No	□n/a	See pH log for results and additional preservatio documentation
Headspace in Methyl Mercury Container	□Yes	□No	MN/A	13.
Headspace in VOA Vials (>6mm)?	□Yes	□No	ØN/A	14.
Trip Blank Present?	☐Yes	□No	□ / •/A	15.
Trip Blank Custody Seals Present? Pace Trip Blank Lot # (if purchased):	Yes	□No	[Z]N/A	
LIENT NOTIFICATION/RESOLUTION Person Contacted:			D	Field Data Required? Yes No
Comments/Resolution:			-	
ECAL WAIVER ON FILE Y N		TEMP	ERATUR	E WAIVER ON FILE Y N
oject Manager Review: :: Whenever there is a discrepancy affecting North Carolina : Incorrect preservative, out of temp, incorrect containers)	compliance	samples, a	copy of thi	Date: